

Draft

Meeting Minutes Transmittal/Approval Unit Manager's Meeting: 1100 Area Richland, Washington January 28, 1993

FROM/APPROVAL	: Robert K. Stewart, 1100-EM-1 Operable Unit Manager, RL
APPROVAL: Davi	R. Einan, 1100-EM-1 Unit Manager, EPA
APPROVAL: Dib	Goswami, 1100-EM-1 Unit Manager, WA Department of Ecology
Meeting Minutes are	attached. Minutes are comprised of the following:
Attachment #1	- Meeting Summary/Summary of Commitments and Agreements
Attachment #2	- Attendance List
Attachment #3	- Agenda For 1100 Area Operable Unit Meeting
Attachment #4	- Action Items Status List
Attachment #5	- 1100-EM-1 Operable Unit FY 1993 Milestones and Planned RI/FS Accomplishments
Attachment #6	- LFI/FFS Flowchart
Attachment #7	- Corrective Actions Currently Being Undertaken to the 1100-EM-1 Human Health Risk Assessment
Attachment #8	- 1100 Area Consolidation; December 2, 1992 Meeting Minutes
Attachment #9	- 1100 Area Consolidation; January 12, 1993 Meeting Minutes

PREPARED BY:

Suzanne Clarke, Kay Kimmel, GSSC (A4-35)

CONCURRENCE BY:

John T. Stewart, USACE 1100-EM-1 Project Manager (A3-61)

Attachment #1

Meeting Summary and Summary of Commitments and Agreements Unit Manager's Meeting: 1100 Area January 28, 1993

- 1 SIGNING OF THE OCTOBER 1100-EM-1 MEETING MINUTES The October minutes were signed with no changes.
- 2 ACTION ITEM UPDATE: (See Attachment #4).

11EM1.104

CLOSED 01/28/93.

J. Stewart

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3 NEW ACTION ITEMS (INITIATED January 28, 1993):

11EM1.105 J. Stewart Submit the minutes from the consolidation meetings held on December 2, 1992 and January 12, 1993 for inclusion in the administrative record via attachment to

the 1100 Area UMM minutes.

4 INFORMATION ITEMS:

- Project Status John Stewart and Kevin Oates presented the 1100 Area schedule (see attachment #5) and a flow diagram of consolidation activities (see attachment #6).
- Risk Assessment Corrective actions currently being undertaken to the 1100-EM-1

 Human Health Risk Assessment are described in Attachment #7.
- <u>Siemens Power Corp. (SPC) RI/FS Status</u> Susan Keith updated the SPC project status, indicating that the RI/FS will be available spring 1993.

5 ADDITIONAL DISCUSSION:

- HQ has approved the Environmental Assessment (EA) and the FONSI is at HQ. The document will be titled RI/FS-EA.
- NRDA concerns are being addressed per HQ.
- Discussion of proposed format plan.
- EPA comments will be provided about February 16, 1993.
- Next Meeting The next meeting will be held on February 24, 1993.

6 INFORMAL AGREEMENT:

• It was agreed that a TPA Change Request for the 1100 area consolidation was not required.

1100 Area Operable Unit Managers Meeting Official Attendance Record January 28, 1993

Please print clearly and use black ink

PRINTED NAME	SIGNATURE	ORGANIZATION	O.U. ROLE	TELEPHONE
KAY KIMMEL		DAMES & MODRE	3 GSSC TO RL	376-1985
DIB GOSWAMI		13 19 19 19 19 19 19 19 19 19 19 19 19 19	OUM	736-3015
RAIMO A-Livas	Land Lie	USACE	Fech Em.	(509) 522-6924
Kevin Oates		USHCE	Ted Mar 100	(509) 522: 6834
JOHN STEWART	John Heunt	USACE	PROT MER	1
Dave Einan		<i>ElA</i>	Unit Meg	507.376 3883
Audree De Angelos		PRC	EPA Support	206-624-2692
m Bill Lum	W. Lum	USGS	EPA Supprest	206 593 6516
Wash Staubitz	26 ft	US65	EPA Support	2065936S/O
Evan Dresel	PEwan Dresd	PNL	5 the ile boundaryle	376-8341
- Susan Keith	Summent	64mforSPC	Consultant to	206889-6321
- LOREN MAAS	One Man	SPC	V 1346áttsválákos 704z trototbitop bettatpájvutábbásva	509-375-8537
Karen Jones		Dames & Moore	655C	509 946-0176
: Walt Perro	Walterleno	US ACE	***************************************	509-372-3704
Steven W. Clark	Store Vola	WHC	Eng- Suport	509-376-1513
disc C. Treichel	Agas Chell Jegges	DOE HQ/EM44/2	Rregion Mg	(301)903-8 17 7
CHARLES S. CLINE	Na Oorth (): 1	=	, , V)	ZOD 438-7556
Bob Stawart	Robert K. Stewart	DOE-RL/FRD	Unit Mar Do	E 509-376-6192
			<i>J J '</i>	
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Attachment #3

Agenda Unit Manager's Meeting: 1100 Area January 28, 1993

- LFI/FFS Flowchart
- Siemens Update
- General Discussions

Attachment #4

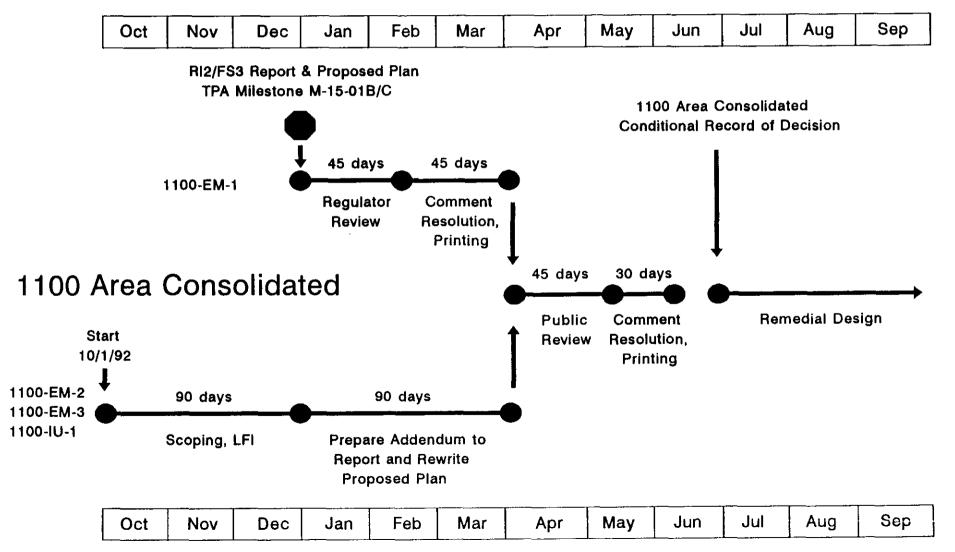
Action Items Status List Unit Manager's Meeting: 1100 Area January 28, 1993

ITEM NO.	ACTION/SOURCE OF ACTION	STATUS
11EM1.104	USACE will release the data input files utilized for groundwater modeling to the regulators as early as possible but no later than December 31, 1992.	Closed 01/27/93.
11EM1.105	Submit the minutes from the consolidation meetings held on December 2, 1992 and January 12, 1993 for inclusion in the administrative record via attachment to the 1100 Area UMM minutes. Action: J. Stewart	New 01/27/93.

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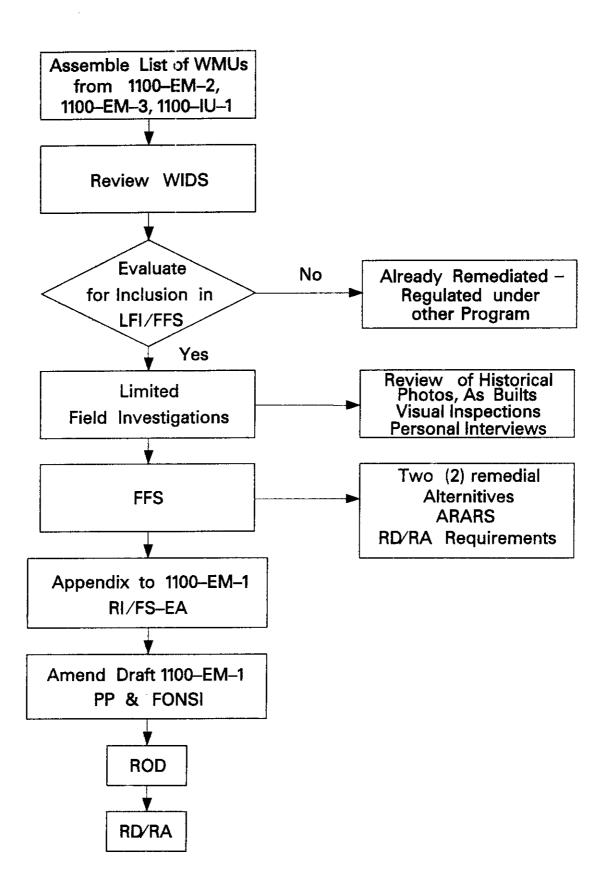
1100-EM-1 Operable Unit FY 1993 Milestones and Planned RI/FS Accomplishments

1100 AREA CONSOLIDATION SCHEDULE



Flowchart

ATTACHMENT #6
PAGE 10F1



January 26, 1993

SUBJECT: Corrective Actions Currently Being Undertaken to the 1100-EM-1 Human Health Risk Assessment

1. The inhalation calculations which used 25% of respirable fraction as being absorbed in the lungs were not adjusted for this error in this revision but will included in the next revision. Use of the 25% is not consistent with EPA comments which stated respirable fraction that is retained in the lungs and absorbed would be accounted for in the inhalation RfD or SF and should not be adjusted for absorption. This may result in a few more contaminants exceeding the preliminary risk-based screening criteria and thus becoming contaminants of potential concern to be carried further into risk assessment process. Update affected Tables in BISRA as required.

- 2. The Fugitive Dust Model (FDM) will also be reran due to a potential error in units in the input data. The error is related to a missing units conversion in the windspeed input factor, and resulted int the underestimation of the airborne dust concentrations by the FDM. Affected tables and relevant discussions in both the BRSRA and BISRA will be revised accordingly.
- 3. An example FDM calculations will be incorporated in the Risk Assessment Appendix.

DON'T SAY IT --- Write It!

DATE: January 11, 1993

TO: Bob Stewart, DOE-RL
Dave Einan, EPA
Rich Hibbard, Ecology
Dib Goswami, Ecology
Kevin Oates, USACE

Telephone: 509-522-9101

FROM: John T. Stewart, A5-20

Dee Lloyd, USACE

CC: Dennis Cannon, USACE Raimo Liias, USACE

SUBJECT:

1100 AREA CONSOLIDATION; DECEMBER 2, 1992 MEETING MINUTES

The above addressees attended the subject meeting in the Federal Building, Room 387E. December 2, 1992. The attached information was handed out and discussed along with preliminary results of the limited field investigations. Highlights of the discussion are outlined below:

- We want to take advantage of process knowledge (what operations took place where, best professional judgement, and the observational approach.
- The document addressing the 1100-EM-2, 1100-EM-3, and 1100-IU-1 Operable Units will be a **Focussed Feasibility Study** (FFS).
- EPA and Ecology must balance the 1100 Area consolidation action timing with the proper regulatory action.
- Remediation/Removal must be prioritized under the proper regulatory action. For USTs, UST regulations will be the ARARs.
- The FFS will list prior UST closures.
- The FFS will support a remedial alternative for the 1100-EM-2, 1100-EM-3, and 1100-IU-1 Operable Units. The 1100-EM-1 OU **Proposed Plan** will be revised to include proposed remedial actions for the other three OUs. Given the current level of uncertainty regarding the potential nature and extent of contamination at the 1100-EM-2, 1100-EM-3, and 1100-IU-1 OUs, the proposed remedial actions for them will be somewhat general in nature.
- The possibility exists that new information on the nature and extent of contamination will be developed after the **Record of Decisison** (ROD). The FFS will discuss the types of administrative and public notification and participation that will will be undertaken depending on the extent of any new information.
- The FFS approach does not require the completion of a baseline risk assessment to support proposing or undertaking remedial actions. Options proposing and supporting remedial actions at the 1100-EM-2, 1100-EM-3, and 1100-IU-1 OUs include extrapolation of the results from the 1100-EM-1 OU baseline risk assessment, use of EPA Region 10 media specific default parameters, use of Ecology soil cleanup policy, or review of similar site types in conjunction with the observational/confirmatory sampling approach during remedial action.
- Each involved organization (DOE-RL, EPA, Ecology, USACE) will evaluate if the approach is adequate to initiate action; but need to

remember that it costs more money to be careful and cautious, and there has been much criticism for being too careful and cautious.

- Kevin Oates will outline the cleanup action process, and to consider post closure care (longterm surveillance and monitoring requirements).
- Kevin Oates will develop an "ARAR Analysis" strawman to present the universe of cleanup levels. Also need to evaluate Ecology's soil cleanup policy.
- Dave Einan and Kevin Oates will check on remedial action choices through the "Presumptive Remedies Group" at EPA-HQ.
- We need to develop a position on milestones during remedial design and remedial action.
- Each involoved organization will consider what would be a show stopper in performing the 1100 Area consolidation concept.
- Bob Stewart will prepare the formal DOE endorsement response to EPA's August 20, 1992 letter by next meeting.
- We need to have more frequent meetings, and bring as much background material as possible to meetings. Attach the information to the meeting minutes, and place the minutes in the Administrative Record.
- The next meeting is scheduled for January 12, 1993 in the EPA conference room.

*****FOR DISCUSSION*****

1100 Area Consolidation Report Format

1.0 Introduction

- Purpose...Expedited Response Action...presumptive remedy approach, limited environmental data, confirmational sampling during RD/RA.
 - Historical Background (Summary)
 - Location Maps

2.0 Site Description

- 2.1 Historical Use
- 2.2 Current Use
- 2.3 Adjacent Areas
- 2.4 Data Research (spills, air photos, as builts, maps, WIDS, etc)
- 2.5 Site Inspections (walkthrough)
- 2.6 Potentail/Suspected Waste types
- 2.7 Interviews
- 2.8 Other Information
- 3.0 Regulatory Status of Each Site

- Right Assessments

Are CERCLA, RCRA, MTCA, UST currently the "reg of choice"...the presentation in this section will rely a great deal on tables that will be analogous to the FS screening process....resulting in specific areas being retained as candidates for future CERCLA response actions. It is expected that sites will fall into one of several categories...

- o already being regulated under RCRA, UST etc...therefore move out of CERCLA process
- o already has been remediated & no further action and/or monitoring required
- o was "discovered" during expedited RI process...ex. "new" tanks or spills.
- o candidate for CERCLA/MTCA remedial actions

In addition, there will need to be discussion re: known instances of contaminated media above regulatory levels.

In addition, there will be a need to discuss NEPA/CERCLA integration

4.0 Presumptive Remedy Analysis

- Presentation of Concept & Process Elements
- Discussion of appropriate remedial technologies (mini-FS)
- ARAR Section.
- 9 Criteria
- 5.0 Summary & Recommendation
 - text & table presenting the candidate sites & appropriate "presumptive remedy"
 - Activities for RD/RA
 - Schedule
- 6.0 References

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******FOR DISCUSSION******

Problem Statement: There is a need to develop a <u>process</u> to govern cleanup actions in advance of a situation where there is limited environmental data. The utility of having a process in place is that it will help to reduce uncertainities associated with remedial actions, such that feild activities can be streamlined and cleanup actions can be confirmed. Alternative approaches could include;

- o assume the most conservative cleanup action levels from the outset.
- o assume conservative levels and adjust accordingly based on site conditions.
- o develop cleanup goals based on site type & assumed contaminants. Goals could be developed through several means....MTCA numbers, review of RODs data base for recent similar actions.

Question: How to deal with action levels & cleanup goals?

Options

- A. Default to MTCA goals up front...do "practicability" analyses as appropriate during RD.
- B. Do a mini-risk assessment during RD when data is collected
- C. Determine presumptive remedy during ROD for "site type", undertake confirmational sampling during RA.
 - o Agree to statistical analyses up front ?? (pre-ROD)
 - o Agree to practicability analysis methodology up front (pre-ROD)
- D. Values from RODs data base
- E. Other(s)

Question: Is there a threshold of information and analysis that EPA & Ecology require to support the consolidation process?

Question: Given that the consolidation approach does not follow conventional RI/FS - ROD - RD/RA process, are there concurrence processes that need to be identified early in the process. There are likely to be issues of NCP consistency and potential precedence setting for EPA & Ecology with respect to process and level of information & analysis prior to remedy selection.

DON'T SAY IT --- Write It!

DATE: January 13, 1993

TO: Bob Stewart, DOE-RL
Dave Einan, EPA
Dib Goswami, Ecology
Kevin Oates, USACE
Dee Lloyd, USACE

FROM: John T. Stewart A5-20

Telephone: 509-376-9101

CC: Dennis Cannon, USACE Raimo Liias, USACE

SUBJECT: 1100 AREA CONSOLIDATION, JANUARY 12, 1993 MEETING MINUTES

The following attendees attended a meeting in the EPA Richland, Washington conference room to discuss the status of the 1100 Area consolidation:

Dave Einan, EPA
Dib Goswami, Ecology
Julie Erickson, DOE-RL
Jim Consort, GSSC
John Stewart, USACE
Kevin Oates, USACE
Dee Lloyd, USACE

John Stewart distributed a summary spreadsheet for the USACE fiscal year 1993 cost account plan (Enclosure 1) indicating how the 1100 Area consolidation effort would be accomplished within existing 1100 Area funding without impacting other operable unit activities currently ongoing or planned on the Hanford Site. Scope for a USACE cost recovery support activity to DOE-RL has been deferred and the programmed funds applied to 1100 Area work activities.

A partial preliminary working draft of the Focused Feasibility Study (FFS) was distributed prior to the meeting (Enclosure 2). Strategy flow diagrams (Enclosure 3) and a preparation schedule for the FFS (Enclosure 4) were handed out at the meeting.

Kevin Oates led the discussion on the general 1100 Area consolidation approach. Highlights of the discussion are outlined below:

- General: Dave Einan requested that the Superfund Accelerated Cleanup Model (SACM) discussion be deleted from the draft document. Replace the SACM discussion with references to the Hanford Past Practices Strategy.
- Section 1.0; Dave Einan requested that discussion of past milestones and changes be limited in the Introduction section in the current draft.
- John Stewart asked DOE, EPA, and Ecology if a TPA change request was required for the 1100 Area consolidation for purposes of establishing a milestone for the work, and providing an audit trail of what was being done and for what reasons. The consensus was that no TPA change request is required. We are accelerating the priority, but not changing a milestone because no milestone is currently assigned to this work. There is no advantage in combining the operable units into one; they can be addressed in a consolidated manner but remain separate. A documented audit trail will be provided through placement of letters and reports in the administrative record.

#9/Page 2 of 3
• Section 1.2; Dave Einan asked what were the NEPA requirements for stating someone has been contacted. Kevin Oates stated he would find out the specifics and get back to Dave.

- Section 3.0; Julie Erickson requested the first bullet be changed to "Currently under regulation or cleaned up by the State or EPA under a statute other than CERCLA or MTCA."
- General; should cite a waste site even if a waste site has been cleaned up prior to inclusion on WIDS. This will provide a complete history the 1100 Area for record purposes.
- Table 3.3; Editorial comment; remove soil sampling from the LFI/FFS activities column.
- Section 4.0; Dave Einan is still reviewing this section. Drop presumptive remedy nomenclature. We are trying to achieve early actions. Dave (and Kevin) think presumptive remedy is not the proper term for what we are trying to accomplish here.

Dave Einan will contact Kevin Oates or John Stewart on a recommendation for the proper name for what we are attempting on the 1100 Area consolidation.

- General; Dave Einan questioned whether we were considering the use of some form of screening sample analysis to minimize offsite lab analysis of samples. Field screening is part of the concept.
- General; Kevin Oates pointed out there are a limited number of FFSs in existence. There may be some concern that we may be short circuiting the RI/FS process. We need to be able to answer why it is satisfactory to use this approach. Kevin suggested the use of the EPA RODs database to indicate what has been used as supporting information in addition to the regulatory analysis of the NCP and EPA guidance for the FFS approach.

Julie Erickson stated that while the database may provide interesting information, it alone would not substantiate the approach we are proceeding with.

Kevin Oates will evaluate the ease of obtaining the information from the database, and decide if it is worth pursuing.

- USACE will develop an analysis of onsite incineration of contaminated soils from the 1100-EM-2, 1100-EM-3, and 1100-IU-1 waste management units to use as a basis of comparison to offsite dosposal. In keeping with the FFS approach of limiting the numbers of remedial alternatives for screening and evaluation, no other alternatives will be developed for contaminated soils.
- Table 3.3; Dee Lloyd questioned required actions for the bus lot dry wells (storm water drainage plan?). Dee will contact Chad Henderson, DOE-RL/PMD, to confirm current actions underway in the general area.
- General; finalizing the 1100-IU-1 OU Site confirmation has been impacted by recent local weather. Everything is covered by snow which may remain for awhile. The level of confirmatory information on the 1100-IU-1 OU may be different than that for 1100-EM-2 and 1100-EM-3 OUs.
- There is also a guestion on what should be included in the 1100-IU-1 OU, (Snively and Benson Ranches, gas wells, other areas?). John Stewart and Kevin Oates will discuss this further with Bob Stewart.

Julie Erickson stated that the ER Program would only address CERCLA/RCRA waste management units. If, during remedial action, additional minor wastes from a non-past practice site were identified near a past practice

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waste manageemnt unit that was being cleaned up, the ER Program would consider cleaning it up as well.

- Dave Einan will evaluate the public awareness needs.
- DOE handles trustee notification.
- \bullet None of the involved organizations (DOE-RL, EPA, Ecology, USACE) have identified any showstopers to date.

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		1st Otr			2nd Qtr			3rd Qtr	1 1 1 1 1 1	1 1 1 1 1	4th Qtr	050	TOTAL
work breakdown structure	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	(\$ K)
3.1 Project Management 3.2 Scoping Activities 3.3, 3.4, 3.5 NO ACTIVITIES PLANNED 3.6 1100-EM-1 Final RI/FS Report 3.7 Post Report Activities 3.8 Miscellaneous Site Services subtotal management reserve Subtotal	11,239 0 0 227,078 8,529 7,700 254,546 24,660 279,208	0	27,882 0 0 135,630 37,554 7,000 208,066 19,315 227,381	21,648 0 0 69,478 57,019 7,000 155,145 15,515 170,660	15,966 0 0 57,716 76,819 7,000 157,301 15,730 173,031	12,487 3,495 0 56,587 40,571 7,000 120,140 12,014 132,154	27,484 2,331 0 22,159 26,242 7,000 85,216 8,573 93,789	11,863 0 0 20,145 25,871 7,000 64,879 6,527 71,408	12,487 0 0 21,948 42,529 7,000 83,964 8,396 92,360	7,491 7,800 0 21,119 26,259 7,000 69,669 7,002 76,671	6,448	12,512 2,952 0 22,560 27,404 6,600 72,028 7,253 79,281	190 23 0 827 425 84 1,549 150
3.9 1100-EM-2, 1100-EM-3, 1100-IU-1 management reserve Subtotal	11,234 2,247 13,481	27,968 5,594 33,562	55,460 11,092 66,552	58,812 11,762 70,574	39,418 7,884 47,302	22,671 4,534 27,205	0 0 0	0 0 0	0 0 0	0 0	0 0	0	218 43 259
3.10 1100 Area Remedial Design management reserve Subtotal	0 0 0	0 0 0	0 0 0	18,401 1,840 20,241	44,530 4,453 48,983	81,994 8,199 90,193	120,603 12,133 132,736	111,196 11,186 122,382	129,597 12,960 142,557	137,765 13,845 151,610	290,103 29,039 319,142	199,401 20,080 219,481	1,134 114 1,247
TOTALS WITHOUT COST			SUPPOR 263,526		241,249	224,805	205,819	176,075	213,561	207,434	354,270	271,429	** \$2,898
Management Reserve Total Monthly Total Quarterly and FY Total	26,907 292,687	24,468 266,394	293,933 853,014	29,117	28,067 269,316	24,747 249,552 780,343	20,706 226,525	17,713 193,788	21,356 234,917 655,230	20,847	35,462 389,732	27,333 298,762 916,775	\$307 \$3,205
3.11 Cost Recovery Support management reserve Subtotal	0 0 0	38,149 7,630 45,779	56,001 11,200 67,201	25.512 5.102 30,614	31,839 6,368 38,207	7,044 1,409 8,453	35,347 7,069 42,416	76,946 15,389 92,335	210,941 42,188 253,129	285,236 57,047 342,283	50,946 10,189 61,135	18,507 3,701 22,208	836 167 1,004
TOTALS WITH COST REC	265,780	280,075	319,527		273,088	231,849		253,021	424,502	492,670	405,216	289,936	\$3,735
Management Reserve Total Monthly Total Quarterly and FY Total	26,907 292,687	32,098 312,173	41,607 361,134 965,994	34,219 292,089	34,435	26,156 258,005 857,617	27,775 268,941	33,102 286,123	63,544 488,046 1,043,110	77,894 570,564	45,651 450,867	31,034 320,970 1,342,401	\$4,209

Enclosure

1 to-Attachment #9

Encl 1

Enclosure 2 to Attachment #9 1100 Area Consolidation Report

Executive Summary

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This report has been prepared as an addendum to the final Remedial Investigation/Feasibility Study - Environmental Assessment Report (DOE/RL-92-67) for the 1100-EM-1 Operable Unit (OU) at the U.S. Department of Energy (DOE) Hanford Reservation located near the city of Richland in Benton County, Washington. The three remaining OUs, identified as 1100-EM-2, 1100-EM-3 AND 1100-IU-1, are the focus of the information presented in this addendum.

(need a statement re: consistent w/NCP...meets/exceeds DOE milestone for TPA)

The	1100-EM-2	Operable	Unit i	ncludes.	•••••	
The	1100-EM-3	Operable	Unit i	ncludes.	•••••	•
The	1100-IU-1 (Operable T	Jnit in	cludes		

The format of this addendum follows that of a streamlined or focused feasibility study (FFS) as discussed in the preamble to the National Contingency Plan (NCP) at 55 FR 8704, as well as section 300.430 of the NCP (55 FR Vol. 46). This addendum presents the findings of a series of limited field investigations (LFIs) undertaken between October, 1992, and January, 1993, at the three additional OUs. In addition, historical information, including; aerial photographs; waste information data system (WIDS) inputs on waste types, handling practices, or known soil or groundwater contamination; pertinent regulatory aspects (e.g. underground storage tanks regulated under the state UST program); and previous characterizations of the (XX number) waste management units (WMUs) from such documents as the Hanford Past Practices Report (DOE-RL 1904) were reviewed for these areas for indication of potential releases and spills of contaminants to the environment. No additional field sampling and analysis activities were undertaken during the LFIs.

Once the environmental and regulatory information for each WMU was evaluated, each WMU was placed in one of four categories;

- Currently under regulation by the State or EPA under a statute other than CERCLA or MTCA.
- Pending or a candidate for regulation by the State or EPA under a statute other than CERCLA or MTCA.
- Not a candidate for regulation under another statute and is the site of a likely or potential release or spill of contaminants to the environment.
- Not a candidate for regulation under another statute and is the site of a known release or spill of contaminants to the environment.

The LFI efforts identified XX additional WMUs beyond the initial inventory. The screening efforts resulted in the identification of XX WMUs that are currently or a candidate for management under other regulatory programs. Of the remaining WMUs, XX are considered to be likely or potential sites of releases or spills, and XX the site of known releases or spills. The last three categories were evaluated for cleanup under the FFS approach. The categories of WMUs evaluated for cleanup are further broken down by waste or site type. Those categories include;

	NUMBER	APPROX VOL (Total)
USTs		11 11 11 11
Soils contaminated with ABC		11 14 14 11
Soils contaminated with XYZ		W W W W
Tar Spills		15 75 70 10
Septic Tanks		
Landfill/Debris sites		
GW Monitoring Locations		
(Others)		
etc.		

The FFS approach is streamlined in the sense that for known contaminant types, there are known treatment technologies. Therefore, it is not necessary to evaluate a wide range of treatment alternatives. Remediation of the waste or site types listed above were evaluated in such a manner. For contaminated soils, two remedial approaches were evaluated; offsite treatment/disposal at a permitted RCRA facility; and onsite thermal destruction (incineration). The latter was evaluated in order to assess potential savings that might result from on-site incineration of soils from multiple WMUs.

The LFI/FFS approach differs from the more traditional CERCLA process in that a Human Health and Ecological Risk Assessment were not conducted for the three OUs, nor was the potential for contaminant migration rigorously investigated. In place of those activities, a decision was made to establish media specific cleanup levels for soils and potential windblown dusts containing hazardous substances and assess site risks in a qualitative manner. Soils and dusts would be sampled in the field during a combined remedial design/remedial action (RD/RA) process. Soils and dusts exceeding the cleanup criteria would be excavated and treated/properly disposed of in a permitted facility. groundwater, a monitoring and evaluation program would be implemented during the RD/RA process to evaluate the potential impacts, if any, to groundwater of contaminant releases at the WMUs. While this approach results in a greater degree of uncertainty at the "up front" stage of the CERCLA process, resources are focused on cleanup efforts. These efforts were undertaken with the intention of being consistent with national efforts by EPA in the implementation of the Superfund Accelerated Cleanup Model (SACM), and in particular with efforts under that initiative to incorporate a streamlined "presumptive remedy" selection process for specific site types in lieu of the more traditional CERCLA process. or These efforts were undertaken with the intention to be consistent with efforts by EPA in the implementation of the Superfixed Accelerated Cleanup Model (SACM), by utilizing the focused feasibility study/interim action ROD approach discussed in the NCP.

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The cleanup remedies considered for each of the WMUs were evaluated against the nine evaluation criteria pursuant to the NCP 300.430 (e)(7). These evaluations were completed to provide an analysis of the ability of cleanup alternatives to meet the CERCLA program goals for remedial actions to protect human health and the environment, maintain that protection over time, and minimize the amount of untreated wastes. (may want a statement to the effect this information will support ROD...actions will be considered interim. that way it is more consistent w/NCP...actions will be evaluated for completeness during confirmational sampling...at that time may be considered final...will be documented in 5-yr review, const complete or final ROD, delisting ROD/Package....will be additional opportunity for public input)

1.0 INTRODUCTION

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The 1100 Area of the U.S. Department of Energy's (DOE) Hanford Reservation was placed on the National Priorities List in July 1989, pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. 9601 et seq.,. Based on both documented and undocumented past practices at the 1100 Area, it was determined that pollutants were released to the environment and that those contaminants might present a danger to the public health and welfare.

In anticipation of regulatory actions, the U.S. Department of Energy Field Office, Richland (DOE-RL) divided the 1100 Area into four operable units (OUs) and initiated CERCLA response planning. DOE-RL, the U.S. Environmental Protection Agency (EPA), and the Washington Department of Ecology (Ecology) jointly assigned the 1100-EM-1 Operable Unit the highest priority, within both the 1100 Area and the Hanford Site as a whole. In the fall of 1992, it was determined that the additional 1100 area OUs; 1100-EM-2, 1100-EM-3 AND 1100-IU-1, would be potential candidates for an accelerated evaluation that could enable all of the 1100 area OUs to be addressed in one Record of Decision (ROD) that is currently scheduled to be issued in July, 1993. This accelerated approach would allow for consolidation of resources and has the potential to greatly shorten the timeframe associated with the CERCLA process.

The Hanford Federal Facility Agreement and Consent Order, also referred to as the Tri-Party Agreement (TPA) issued in May 1989, governs all CERCLA efforts at Hanford. The 1100-EM-1 Remedial Investigation (RI)/Feasibility Study (FS) work plan (DOE/RL-88-23), mandated by the TPA, led to the first phase of the RI, which was completed in the summer of 1990. The Phase I RI report (DOE/RL-90-18) was issued in August 1990, followed by the Phase I and II FS Report (DOE/RL-90-32) issued in December 1990.

The Phase II RI was initiated with the publication of the draft RI Phase II Supplemental Workplan (DOE/RL-90-37) in October 1990. According to the TPA, the Phase II RI was due for completion in September 1991. Due to changes in the scope of remedial characterization activities, DOE, EPA, and Ecology renegotiated the Phase II RI milestone, M-15-01B, and combined it with the Phase III FS milestone M-15-01C, to become the combined RI Phase II/Phase III FS milestone M-15-01B/C with the new submittal date of

December 1992. The 1100-EM-1 Operable Unit Final RI/FS-EA Report has been prepared to meet the DOE's obligations for that combined milestone. The information and evaluations presented in this addendum are considered to be an amendment to that milestone and replace TPA milestones XXXXXXXXXXXXX & X.

1.1 PURPOSE OF ADDENDUM

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The 1100-EM-1 Phase I RI report concentrated on the initial site characterization for the 1100-EM-1 Operable Unit. The Final RI/FS-EA Report focused on more complete site characterization, as well as an additional investigation of problematic issues developed during Phase I. A description of the activities undertaken is found in the Phase II RI Supplemental Work Plan (Revision II) DOE/RL-90-37. The Final RI/FS-EA Report complements the initial characterization by providing a more definitive characterization of the nature and extent of the threats to human health and the environment posed by contaminant releases from that Operable Unit.

This Addendum presents the results of limited field investigations (LFIs) and a focused feasibility study (FFS) effort for the additional 1100 area OUs. The LFI/FFS approach differs from the traditional CERCLA process in that a Human Health and Ecological Risk Assessment were not conducted for the three OUs, nor was the potential for contaminant migration rigorously investigated. In place of these aspects, the decision was made to establish media specific cleanup levels for soils and potential windblown dusts containing hazardous substances. Soils and dusts will be sampled during a combined remedial design/remedial action (RD/RA) process. Soils and dusts exceeding the cleanup criteria would be excavated and treated/properly disposed of in a permitted offsite facility. For groundwater, a monitoring and evaluation program would be implemented during the RD/RA process to evaluate the potential impacts, if any, to groundwater of contaminant releases from the WMUs. While this approach results in greater uncertainty at the "up front" stage of the CERCLA process, it is intended to focus resources on cleanup efforts. These efforts were undertaken with the intention to be consistent with national efforts by EPA in the implementation of the Superfond Accelerated Cleanup Model (SACM). and in particular with efforts under that initiative to incorporate a streamlined "presumptive remedy" selection process for specific site types in lieu of the more traditional CERCLA process, or These efforts were undertaken with the intention to be consistent with efforts by EPA in the implementation of the Superfund Accelerated Cleanup Model (SACM), by utilizing the focused feasibility study/interim action ROD approach discussed in the NCP.

This addendum provides only sufficient redevelopment of material from the limited field investigations (LFIs) to allow the reader to follow the logic of the technical discussions presented in this addendum. Familiarity with additional investigative reports published on the 1100 Area and developed during the LFIs is assumed for a <u>critical</u> review of the findings and recommendations presented in this document. A list of documents that were relied on to develop and present the information and evaluations in this addendum are included in section 6.0 and are present in the 1100 Area Administrative Record,

The development of this addendum has been the result of a concurrent effort on the part of DOE, EPA, Ecology and the U.S. Army Corps of Engineers. In effect, this has resulted in an on-going regulatory review and comment process as information from the LFI and FFS activities was developed. As such, regulatory agencies have made comments during the addendum development, and DOE has had the opportunity to respond to those comments. Further revisions and/or modifications based on additional comments from regulators and/or the public to the Final RI/FS-EA Report, or this addendum, will follow guidelines as stated in paragraph 9.2.1 of the TPA.

1.2 NATIONAL ENVIRONMENTAL POLICY ACT

This report has also been prepared to address the requirements for an environmental assessment as defined in the Council on Environmental Quality regulations for implementing the procedural requirements of the National Environmental Policy Act (NEPA) and the DOE orders for implementing NEPA. These regulations and orders require an environmental assessment to provide brief discussions of the need for the proposal, alternatives considered, the environmental impacts associated with each alternative, and a listing of agencies and persons contacted.

The regulatory authority for the proposed action is discussed above in section 1.1. The affected environment is described in detail below in Chapter 2. The environmental and human health impacts and the rationale for requisite actions at the site are presented in Chapter 3. In Chapters 4 and 5, remedial alternatives are developed, screened, and assessed. Effectiveness, implementability, and other criteria are also evaluated to determine if protection of human health and the environment are being addressed, and to meet the intent of regulatory criteria.

To date numerous agencies and persons have been contacted including: the Hanford Cultural Resources Laboratory; EPA Region 10, Hanford Project Office; Washington State Department of Ecology, Hanford Facility Project Office; and the Department of the Interior (DOI), National Oceanic and Atmospheric Administration (NOAA). Additional agencies and persons will be contacted through the public and regulatory review process for this document.

The DOE will use this LFI/FFS Addendum to the Final RI/FS-EA Report to determine whether the potential environmental impacts are significant enough to warrant further action at the 1100-EM-2, 1100-EM-3 and IU-1 operable units. Table (XYZ) presents a directory of NEPA values that were evaluated as part of the LFI/FFS efforts. A Finding of No Significant Impact will be prepared and published by the DOE if it is determined that potential environmental impacts are not significant.

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TABLE 1. Directory of NEPA Values and Location in 1100 Documents

	DOE/RL-92-67 Addendum	DOE/RL-92-67
HYSICAL CHARACTERISTICS		
Operable Unit Vicinity	Section 2.3	Section 1.4
Meteorology		Section 2.1
Hydrology		
Geology		
ECOLOGICAL CHARACTERISTICS		
Human Ecology	Section 2.1	
Land Use	Section 2.2	
Water Use	Section 2.2	
Cultural Resources	Section 2.1	
Wildlife Ecology	Section	Appendix L
Terrestrial Ecology	Section	
Aquatic Ecology		
Sensitive Environments		
MPACTS OF REMEDIAL ACTIONS		
Compliance with Statutory Law	Chapter 3.0	
Short-Term Impacts	Section 4.4	
Long-Term Impacts	Section 4.4	
Impacts to Resources	Section 4.4	
Effects to Public Health	Section 4.4	
GENCIES/PERSONS CONTACTED	Section 1.1	
AND USE, POLICIES, CONTROLS		**

1.2.1 Natural Resource Damage Assessments

CERCLA and the Clean Water Act (CWA), 33 U.S.C. 1251-1376, provide that natural resource trustees may assess damages to natural resources resulting from a discharge of oil or a release of a hazardous substance covered under CERCLA or the CWA and may seek to recover those damages. To this end, a Preliminary Natural Resource Survey was completed by NOAA.

According to the NCP [section 300.160 (a)(3)] the lead agency shall make available to the trustees of affected natural resources information and documentation that can assist the

trustees in the determination of actual or potential natural resource injuries.

1.2.2 Trustees for Natural Resources

The trustees for Natural Resources are NOAA, DOE, and the State of Washington. Potential trustees include the following Indian Tribes: Yakima Indian Reservation, Nez Perce Tribal Executive Committee, Federated Tribes of the Umatilla, and the Tribal Council Confederated Tribes of Warm Springs Reservation. Copies of this Addendum and the RI/FS-EA Report are to be made available to the trustees and potential trustees for Natural Resources.

2.0 Site Description

- 2.1 Physical Characteristics
- 2.2 Historical Use
- 2.3 Current Use
- 2.4 Adjacent Areas
- 2.5 Data Research (spills, air photos, as builts, maps, WIDS, etc)
- 2.6 Site Inspections (walkthrough)
- 2.7 Potential/Suspected Waste types
- 2.8 Interviews

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- 2.9 Other Information
- 2.10 Location Maps

3.0 Regulatory Status of 1100-EM-2, 1100-EM-3 and 1100-IU-1 Operable Units

This chapter presents information on the regulatory status of each waste management unit (WMU) that has been identified in the 1100-EM-2, 1100-EM-3 and IU-1 Operable Units. Once the historical and environmental information presented in Chapter 2 was collected, regulatory information for each WMU was evaluated and each WMU was placed in one of four categories;

- o Currently under regulation by the State or EPA under a statute other than CERCLA or MTCA.
- o Pending or a candidate for regulation by the State or EPA under a statute other than CERCLA or MTCA.
- o Not a candidate for regulation under another statute and is the site of a likely or potential release or spill of contaminants to the environment.
- o Not a candidate for regulation under another statute and is the site of a known release or spill of contaminants to the environment.

The WMUs that were placed under the first category, "currently under regulation" are presented in Table 3.1. It is not expected that those WMUs will require any further CERCLA or MTCA regulatory review and would be candidates for exclusion from the 1100 Area NPL designation. The WMUs that were placed under the second category, "pending or candidate for regulation" are presented in Table 3.2. Those WMUs will require a decision by EPA or Ecology regarding whether to address those WMUs under the CERCLA/MTCA processes or to administratively place them under other regulatory programs such as RCRA or UST. Those sites were also evaluated as part of the FFS efforts. The WMUs from the third and fourth categories, as well as those from the third category are presented in Table 3.3.

3.1.1 Overview of RCRA, UST Regulatory Requirements

This section provides an overview of the regulatory mechanisms and cleanup requirements of the state administered RCRA and UST programs for the Hanford facility. This is intended to demonstrate the type of actions that have been or are planned for the WMUs that are currently administered under these programs (see Table 3.1) It also provides a framework to evaluate and compare/contrast cleanup actions for WMUs listed in Table 3.2 in the event those WMUs are regulated under RCRA or UST, or are retained in the CERCLA/MTCA process.

3.1.1.2	KCKA.	•	•	•	•	•	•	 •	
3.1.1.3	UST								

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3.2 NEPA/CERCLA Integration

TABLE 3.1 WASTE MANAGEMENT UNITS FROM 1100-EM-2, 1100-EM-3 and 1100-IU-1 OPERABLE UNITS CURRENTLY REGULATED OR PREVIOUSLY REMEDIATED

WASTE SITE	LFI/FFS ACTIVITY	CURRENT REGULATORY AUTHORITY	POTENTIAL CERCLA ACTIVITY
1100-EM-2			
Bus Shop Underground Hoist Rams	Visual Inspection Personnel Interviews Review Analysis Results of Previously Sampled Soils	77	None Anticipated at this time based on current knowledge
Hazardous Staging Area	Visual Inspection Personnel Interviews Review RCRA Satellite Accumulation Area Program	RCRA	None Anticipated at this time based on current knowledge
Used Oil Tank 4 (Unit 1171-4)	Visual Inspection Personnel Interviews Review UST Program	UST	None Anticipated at this time based on current knowledge
ૂ⊌sed Oil Tank 5 (Unit 1171-5)	Visual Inspection Personnel Interviews Review UST Program	UST	None Anticipated at this time based on current knowledge
Used Oil Tank 6 (Unit 1171-6)	Visual Inspection Personnel Interviews Review UST Program	ust	None Anticipated at this time based on current knowledge
Demolition Pit (Unit 703-1)	Visual Inspection Personnel Interviews	?	None Anticipated at this time based on current knowledge
1100-EM-3			
* 1°208 Hazardous Waste Staging Area	Visual Inspection Personnel Interviews Review RCRA Satellite Accumulation Area Program	RCRA	None Anticipated at this time based on current knowledge
1226 Hazardous Waste Staging Area	Visual Inspection Personnel Interviews Review RCRA Satellite Accumulation Area Program	RCRA	None Anticipated at this time based on current knowledge
1240 Hazardous Waste Staging Area	Visual Inspection Personnel Interviews Review RCRA Satellite Accumulation Area Program	RCRA	None anticipated at this time based on current knowledge
Simulated High-Level Waste Slurry TSD	Visual Inspection Personnel Interviews Review RCRA Satellite Accumulation Area Program	RCRA	None anticipated at this time based on current knowledge
Used Oil Tank	Visual Inspection Personnel Interviews Review UST Program	UST	None anticipated at this time based on current knowledge
1100-IU-1			
6652-C Control Center UST	Verify Location & Status of mgmt by PNL under UST Program	UST	None anticipated at this time based on current knowledge

TABLE 3.2 CANDIDATE WMUS FOR REGULATION UNDER RCRA/UST 1100-EM-2, 1100-EM-3 and 1100-IU-1 OPERABLE UNITS

WASTE SITE	LFI/FFS ACTIVITY	POTENTIAL REMEDIATION ACTIVITY
1100-EM-2		
Steam Pad Tank # 2 4000 gal Fiberglass tank last contained wastewater	Review GW Data Visual Inspection Personnel Interviews Review UST Program	Install Wells and Monitor
Steam Pad Tank # 3 4000 gal Fiberglass tank last contained wastewater	Review GW Data Visual Inspection Personnel Interviews Review UST Program	Install Wells and Monitor
700 Area Waste Solvent Tank (Unit 703-1)	Visual Inspection Personnel Interviews Review UST Program	Drum & Ship, with Confirmatory Sampling
1100-EM-3		
1234 Storage Yard	Visual Inspection Personnel Interviews Review RCRA Satellite Accumulation Area Program	Drum & Ship with Confirmatory Sampling
JA Jones Oil Storage Tanks (2) Unknown Volume	Evaluate Existing GW Data	Remove UST Soil to TSDF Confirmatory Sampling
1262 Solvent Tanks (3) Last Contained Carbon Tetrachlorida Vol < 500 gal	Evaluate Existing GW Data	Remove UST Soil to TSDF Confirmatory Sampling
1100-IU-1		
6652-C Control Center UST	Verify Status	77
Miscellaneous Abandoned USTs 2 - 275 gal oil 5 - 1000 gal fuel oil 1 - 1500 gal fuel oil 3 - 2000 gal fuel oil 1 - 2000 gal oil 1 - 3000 gal fuel oil 1 - unknown vol of oil	Review Records Confirm Locations & Volumes	Geophysical Surveys Remove USTs Ship Soils/UST to TSDF Confirmatory Sampling
6652-G UST 2000 gal Fuel Oil Tank	Review Records Confirm Locations & Volumes	Geophysical Surveys Remove USTs Ship Soils/UST to TSDF Confirmatory Sampling
6652-L UST Unknown Volume Laet Contained Diesel	Review Records Confirm Locations & Volumes	Geophysical Surveys Remove USTs Ship Soils/UST to TSDF Confirmatory Sampling
8652-P UST Unknown Volume Last Contained Diesel	Review Records Confirm Locations & Volumes	Geophysical Surveys Remove USTs Ship Soils/UST to TSDF Confirmatory Sampling
Missile Maintenance & Assembly Area UST 275 gal Fuel Oil	Review Records Confirm Locations & Volumes	Geophysical Surveys Remove USTs Ship Soils/UST to TSDF Confirmatory Sampling

TABLE 3.3 LIST OF WMUs WITH KNOWN OR SUSPECTED CONTAMINANT RELEASES AND POTENTIAL REMEDIAL ACTIONS FOR 1100-EM-2, 1100-EM-3 AND 1100-IU-1 OPERABLE UNITS.

WASTE SITE	LFI/FFS ACTIVITIES	POTENTIAL REMEDIAL ACTIVITY
1100-EM-2		
Steam Pad Tank #2 4000 gal fiberglass tank last contained wastewater	Design Groundwater Environmental Monitoring Well Program	Install Wells and Monitor Remove UST Ship Soil To TSDF
Steam Pad Tank #3 4000 gal fiberglass tank last contained wastewater	Design Groundwater Environmental Monitoring Well Program	Monitor Groundwater Remove UST Ship Soil To TSDF
700 Area Waste Solvent Tank (Unit 703-1)	Visual Inspection Personnel Interviews Review UST Program	Drum & Ship, with Confirmatory Sampling
Tar Flow	Soil & GW Monitoring Plan	Remove Waste
Stained Sands	Soil & GW Monitoring Plan	Remove Waste
"NEPTUNES POTATO & SEPARATOR TANK (TRIDENT)		Soil Samples
BUS LOT DRY WELLS	PREPARE STORM WATER DRAINAGE PLAN	Soil Samples Remove Waste
1100-EM-3		
1234 Storage Yard	Soil Sampling	Drum & Ship with Confirmatory Sampling
1240 SUSPECT SPILL AREA	SOIL & WASTE SAMPLING	Soil Samples Remove Waste
JA Jones Yard Hazardous Weste Steging Area	Soil Sampling	Drum & Ship with Confirmatory Sampling
Unplanned Release (of mixed waste)	Drain Sample & Analysis	Soil Samples Remove Waste
1208 Sandblast Area	Random Sampling Plan Plume Analysis	Sample spent sand & soil beneath sand Remove Waste
JA Jones Oil Storage Tanks (2) Unknown volume	Soil Sampling Eval Exist GW Data	Remove UST Ship Sail Ta TSDF
1262 Transformer Pad	Soil Sampling	Sample Soil (PCBs) Remove Pad & Soil
1262 Solvent Tanks (3) Last contained Carbon Tetrachloride volume <500 gal	Soil Sampling Eval Exist GW Data	Remove UST Ship Soil To TSDF
1100-IU-1		
Potential Landfill at Control Center top of Rattleenake Mtn	LFI Activity Pending	To be determined if landfill identified during LFI activity
6652 C UST AT CONTROL CENTER	NEED LOCATION Verify status	
6052 C SSL Autive Septic Tenk	Sell Sempling Sell Gee	None entirepreted at this time based on current knowledge
6852-C SSI Inactive Septic Tank	Sall Sempling Soll Gee	Name entirepased of this time based on ourrent knowledge

WASTE SITE	LFI/FFS ACTIVITIES	POTENTIAL REMEDIAL ACTIVITY		
6852:G ALE Field Storage Building Septic Tank	Sait Sempling Sait Gee	None extoquated at this time based on current knowledge		
6652-I ALE Headquarters Septic Tank	Soil Sampling Soil Gas	Drum & Ship with Confirmatory Sampling		
Abandoned Under Ground Storage Tanks	Geophysical	Ship with Confirmatory Sampling		
2 - 275gel oil 5 - 1000gel fuel oil 1 - 1500gel fuel oil 3 - 2000gel fuel oil 1 - 2000gel oil 1 - 3000gel fuel oil 1 - unknown vol of oil		Remove UST		
6652-G UST 2000gal fuel oil		Ship with Confirmatory Sampling Remove UST		
6652-P UST unknown volume last contained diesel	Filth. d	Ship with Confirmatory Sampling Remove UST		
e652-L UST unknown volume ast contained diesel	review existing data to obtain volume	Ship with Confirmatory Sampling Remove UST		
Missile Bunker sump	Sediment/Soil Samples	Drum & Ship with Confirmatory Sampling		
Missile Bunker Landfill	Soil Gas Soil Samples Geophysical	Drum & Ship with Confirmatory Sampling		
Missile Refueling Area Berm	Soil Samples	Drum & Ship with Confirmatory Sampling		
Missile Refueling Acid Neutralization Pit	Sediment/Sail Samples	Drum & Ship with Confirmatory Sampling		
Missile Refueling JP-4 Fueling Area	Sediment/Soil Samples	Drum & Ship with Confirmatory Sampling		
Missile Maintenance & Assembly Area Inactive Septic System	Sediment/Soil Samples	Drum & Ship with Confirmatory Sampling		
Missile Maintenance & Assembly Area Transformer Pad	Soil Samples	Drum & Ship with Confirmatory Sampling		
Missile Maintenance & Assembly Area UST 275gal fuel oil	Geophysical	Drum & Ship with Confirmatory Sampling		
Missile Maintenance & Assembly Area Acid Storage Building	Soil Samples	Drum & Ship with Confirmatory Sampling		
Missile Maintenance & Assembly Area Paint Building	Soil Samples	Drum & Ship with Confirmatory Sampling		
Missile Maintenance & Assembly Area Dry Well	Sediment/Soil Samples	Drum & Ship with Confirmatory Sampling		
GAS EXPLORATION WELLS(4)	Perform site surveillance	SAMPLE PRIN		
Anti-Aircraft Artillery	Perform site surveillance	Deactivate found ordinance, if any		
Homestead Landfills	Soil Gas Soil Samples	Drum & Ship with Confirmatory Sampling		
Homestead Cisterns	Sediment/Soil Samples	Drum & Ship with Confirmatory Sampling		

4.0 Presumptive Remedy/Interim Action Analysis

4.1 Presentation of Concept & Process Elements

The National Contingency Plan (NCP) in both the preamble and main text incorporate, goals, expectations and management principles that favor a bias for action.

The introduction to section 300.430 of the NCP states..."The purpose of the remedy selection process is to reduce, or control risks to human health and the environment. Remedial actions are to be implemented as soon as site data and information make it possible to do so." The preamble on page 8704 also reflects this bias for action.

"EPA expects to take early action at sites where appropriate, and to remediate sites in phases using operable units as early actions to eliminate, reduce or control the hazards posed by a site, or to expedite the completion of total site cleanup. In deciding whether to initiate early actions, EPA must balance the desire to definitively characterize site risks and analyze alternative remedial approaches for addressing those threats in great detail with the desire to implement protective measures quickly."

" To implement an early action under a remedial authority, an operable unit for which an interim action is appropriate is identified. Data sufficient to support the interim action decision is extracted from the ongoing RI/FS that is underway for the site or final operable unit and an appropriate set of alternatives is evaluated. Few alternatives, and in some cases perhaps only one, should be developed for interim actions. A completed baseline risk assessment generally will not be available or necessary to justify an interim action. Qualitative risk information should be organized that demonstrates that the action is necessary to stabilize the site, prevent further degradation, or achieve significant risk reduction quickly. Supporting data, including risk information, and the alternatives analysis can be documented in a focused RI/FS. However, in cases where the relevant data can be summarized briefly and the alternatives are few and straightforward, it may be adequate and more appropriate to document this supporting information in the proposed plan that is issued for public comment. This information should also be documented in the ROD. While documentation of the interim action decisions may be more streamlined than for final actions, all public, state and natural resource trustee participation procedures specified elsewhere in this rule must be followed for such actions."

"On a project specific basis, recommendations to ensure that the RI/FS and remedy selection process is conducted as effectively and efficiently as possible include:

- 1. Focusing the remedial analysis to collect only additional data needed to develop and evaluate alternatives and to support design.
- 2. Focusing the alternative development and screening step to identify an appropriate number of potentially effective and implementable alternatives to be

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analyzed in detail. Typically, a limited number of alternatives will be evaluated that are focused to the scope of the response action planned.

- 3. Tailoring the level of detail of the analysis of the nine evaluation criteria (see below) to the scope and complexity of the action. The analysis for an operable unit may well be less rigorous than that for a comprehensive remedial action designed to address all site problems.
- 4. Tailoring selection and documentation of the remedy based on the limited scope or complexity of the site problem and remedy.
- 5. Accelerating contracting procedures and collecting samples necessary for remedial design during public comment period."

This is further reflected in section 300.430(e)(1); "...The lead agency may develop a feasibility study to address a specific site problem or the entire site. The development and evaluation of alternatives shall reflect the scope and complexity of the remedial action under consideration and the site problems being addressed." and ..."The lead agency shall include an alternatives screening step, when needed, to select a reasonable number of alternatives for detailed analysis."

(Hokay...in the event presumptive remedy is too far in the future and/or not evolving as the appropriate vehicle to be of timely use in the 1100 consolidation drill, firmly embracing the interim action approach may well be the best viable alternative.)

Recent efforts on the part of EPA to further the implementation of this approach through the Superfund Accelerated Cleanup Model (SACM) has led to the development of a "Presumptive Remedy" approach for specific contaminated "site types" (i.e. XXX) as well as the development of standard soil cleanup levels.

The presumptive remedy/interim action approach tailors data gathering and remedial alternative analysis in a manner such that experiences from remediating the same type or similar sites is utilized. This approach is intended to accelerate and significantly reduce the RI/FS process in order to implement cleanups sooner in the process. The WMUs in the 1100-EM-2, 1100-EM-3 and 1100-IU-1 areas are "site types" that the same or similar circumstances have been encountered and effectively remediated. For example, the WMU identified as XXXX is known/suspected to have soils contaminated with XXXX due to its use as a XXXX. At XXX NPL sites where the circumstances are similar and the soils contamination the same, thermal destruction has been selected/implemented at (all, 92 % etc). This technology has been identified as a Presumptive Remedy for this site type or this site type was identified as a candidate for interim action and therefore a rigorous field investigation and subsequent detailed analysis of cleanup alternatives is not warranted. Instead, the LFI/FFS approach discussed in the previous sections was undertaken. The following sections of this chapter present more details on the different site types encountered in the 1100-EM-2, 1100-EM-3 and 1100-IU-1 areas, and the subsequent presumptive remedies/interim actions that were developed.

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- 4.2 Presentation of Remedial Technologies
- 4.2.1 Offsite Disposal

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- 4.2.2 Onsite Thermal Destruction
- 4.3 Applicable or Relevant and Appropriate Requirements (ARARs)

Intro...(paraphrase NCP or lift from RI/FS-EA report)

4.3.1 Discussion of ARARs, chemical, location, action specific

5.0 Summary & Recommendation

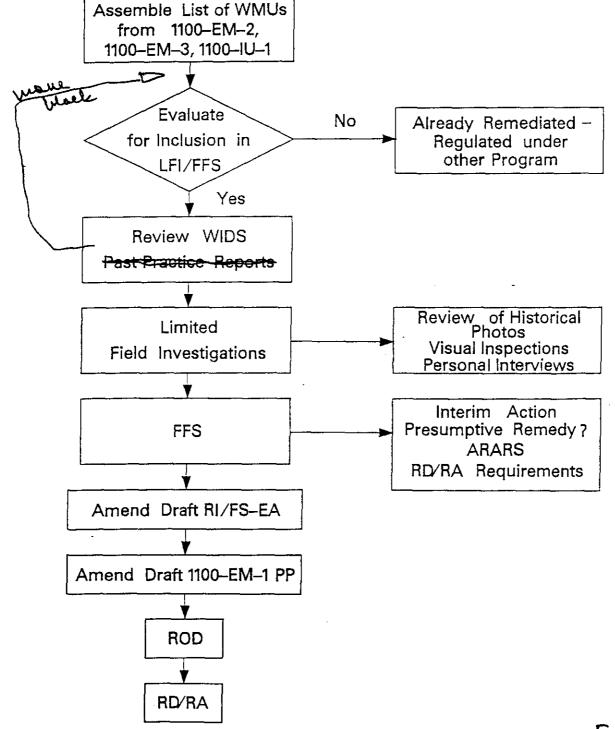
- text & table presenting the candidate sites & presumptive remedy/interimaction
- Activities for RD/RA

6.0 References

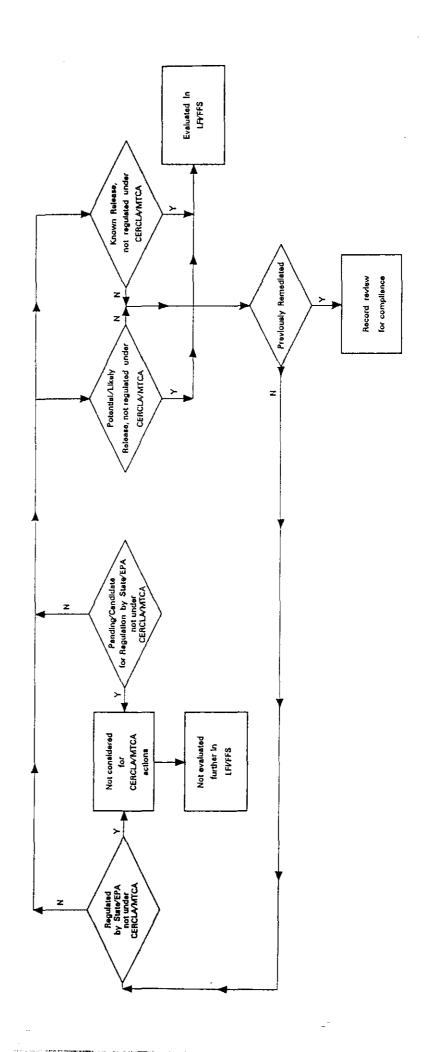
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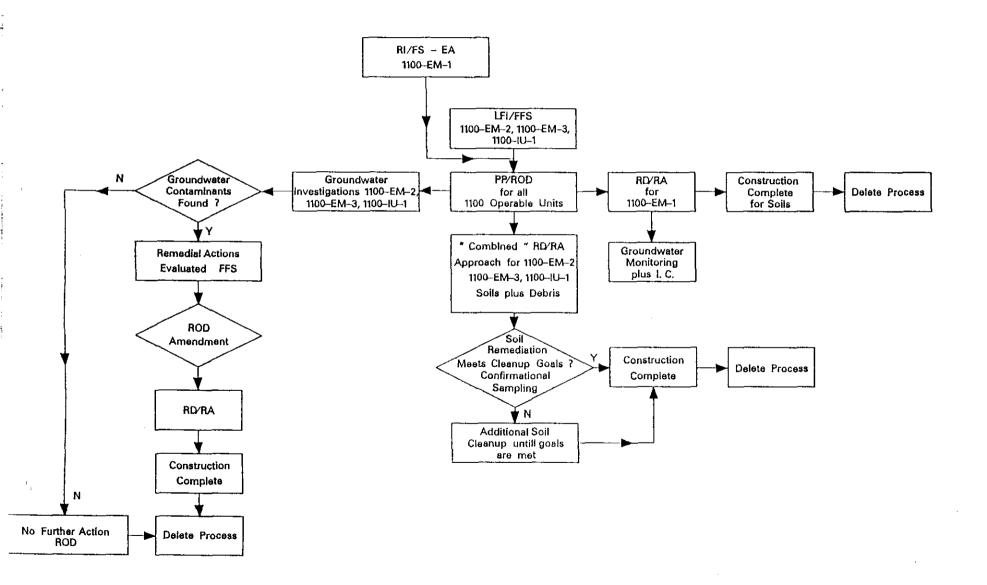
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LFI/FFS Flowchart



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Enclosure 4 to Attachment #9

1100 Consolidation Tasks

LFI - Organize all historical info by WMUs...need to develop a technical appendix for the 1100 consolidation report that will contain all tech info (WIDS, historical photos, as builts, personal interview info). It will need a limited amount of narrative, including; a table of contents; a 1-2 page intro; 1-2 paragraphs for each WMU informing the reader as to what it is they are looking at/what is known about the WMU (physical structure, contaminants etc.

- The information from the appendix needs to be summarized (heavy use of tables) in sections 2.5, 2.6, 2.7, 2.8, & 2.9 of the report
- Finish IU-1 walkthrough (Dee, Jim, Ron)
- Evaluate historical IU-1 info prior to next walkthrough (Dee, Jim, Ron)
- Evaluate historical Camp Hanford drawings for on past practices (Dee)
- Evaluate historical GW data for EM-2, EM-3 & IU-1 (Mat, Jeff, Jim)
- Verify Regulatory Status of WMUs from Table 3.1 (Dee)

Executive Summary needs:

- o pg 1...brief description of EM-2, EM-3 & IU-1 (Mat, Jim)
- o Summary info (Pg2) of WMUs, type, contams & Vol/Number estimates

Chap 1 & Exec Summary...need to determine is 1100 consolidation a TPA milestone event & should it be/does an existing event need to shifted? Whats' involved. (DOE)

Chap 2. Site Description...All sections need to be written

2.0 Site Description...Intro

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2.1 Physical Characteristics (Jim, Mat)

2.2 Historical Use (Dee, Jim)

2.3 Current Use (Jim, Dee)

2.4 Adjacent Areas (Dee, Mat)

2.5 Data Research (spills, air photos, as builts, maps, WIDS, etc) (Dee, Jeff, Ron, Carl)

- 2.6 Site Inspections (walkthrough writeups) (Dee, Jim, Ron)
- 2.7 Potential/Suspected Waste types

(Dee, Clark, Jeff)

2.8 Interviews

(Dee, Jeff)

2.9 Other Information

(Mat)

2.10 Location Maps

(Dee, Carl)

Chap 3 Regulatory Status of WMUs

- Overview of RCRA & UST sections need to be written (Clark working on this)
- NEPA/CERCLA integration section needs writing (Kevin)

Chap 4 Presumptive Remedy/Interim Action

- decision needed on which approach to pursue, then edit section 4.1 accordingly (currently it has language for both approaches) (Kevin)
- 4.2 presentation of remedial technologies needs writing (Randy)
- 4.3 ARARs needs writing (Clark working on it)

Chap 5 - 5.1 Summary & Recommendation...needs writing (Kevin)

- 5.2 RD/RA Activities...needs writing...should have info on remedial activities, sampling & analysis...basically all of the pieces that need to be assembled to <u>do</u> and <u>confirmn</u> the cleanups (Randy, Jeff)
- A flow chart would be helpful (Randy, Carl, Ron)

Chap 6 References...needs writing, need to get all references to regulators/Admin Record

- (Dee to construct reference file)

UPCOMING

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- 1. Revise 1100 Proposed Plan
- 2. Revise 1100 FONSI

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TASK	SUBTSK	ASMNT	1/15	1/22	1/29	2/5	2/12	2/19
LFI Appdx		Dee Clark Jeff				X Early	X Target	X Latest
IU-1 Info review		Dee, Jim Ron	Х					
IU-1 Walkovr		Dee, Jim Ron			X (weather variable)			
Review Camp Hanford Drawngs		Dee		Х				
Review GW Data for EM-2,3 and IU-1		Mat, Jeff			X			
Verify WMU status in table 3.1		Dee				X		
Exec Sum	Area descrips	Mat, Jim		Х				
	WMU info	Kevin					X	
Ch l	TPA	Kevin	Х					
Ch 2	2.1	Jim, Mat		X		- Language Control		
	2.2	Mat		Х				
	2.3	Mat, Dee		х				
	2.4	Dee, Mat		х				
	2.5	Dee					X	
	2.6	Dee					X	
	2.7	Dee, Clark Jeff					Х	
	2.8	Dee, Jeff			X			
	2.10	Dee, Carl			Х			

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TASK	SUBTSK	ASMNT	1/15	1/22	1/29	2/5	2/12	2/19
Ch 3	RCRA & UST write up	Clark		Х				
	NEPA Integrtn	Kevin	х					
	4.1	Kevin		Х				
	4.2	Randy			х			
	4.3	Clark		Х				
	4.4	Kevin			х			
Ch 5	5.1	Kevin			Х			
	5.2	Randy			Х			
	5.2 Flowchrt	Randy Carl			Х			
Ch 6		Dee						
Revise Proposed plan		Kevin				X		
Revise FONSI		Kevin				X		
In-House Review of Text		Kevin, others						X
Text to DOE EPA Ecology								X or 2/26

Distribution

Unit Manager's Meeting: 1100 Area January 28, 1993

Roger D. Freeberg /Julie K. Erickson /Bob Stewart	DOE-RL, ERD (A5-19)
June M. Hennig	DOE-RL, WMD (A5-21)
Steven H. Wisness	
Mike Thompson	
Diane Clark	
Mary Harmon	
Lisa Chetnik Treichel	DOE-HQ (EM-442)
John Stewart	
Raimo Liias	. Env. Eng. Branch Chief, USACE (Walla Walla)
Dave Einan	EPA (B5-01)
Ward Staubitz	USGS, Support to EPA
Audree DeAngeles	
Dib Goswami	
Richard Hibbard \Larry Goldstein	WDOE (Lacey)
Lynn Albin	Washington Dept. of Health
Chris Abraham	
Lauren Maas	
Clive Francis	
Susan Keith	Geraghty & Miller
Thomas Wintczak	Prgm. Mgr. WHC (H6-27)
Diana Sickle	WHC (H6-27)
Chris Widrig (Please route to:)	PNL (K1-21)
Wayne Martin PNL (K1-19)	
Mark Hanson PNL (K1-51)	
Roy Gephart PNL (K1-22)	
Steve Slate PNL (K1-19)	
Joan Keller PNL (K1-21)	
Dennis Kreid PNL (K1-22)	
Ben Johnson PNL (K1-78)	
	-

C. *

Original Sent To: ADMINISTRATIVE RECORD: 1100-EM-1; Care of EDMC, WHC (H4-22)

Please contact Suzanne E. Clarke (D&M 376-8189) or Kay Kimmel (376-1985) if further changes to the distribution list are needed.

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